

### Context

As one of the few foundations in the country devoted exclusively to rural needs, the Blandin Foundation aims to move rural places forward and has a keen interest in understanding the challenges facing rural education. In Minnesota, 65% of public-school districts are in rural communities, and they serve 25% of Minnesota's students.

In 2022, data became available to quantify COVID's aggregate impact on students and initial test scores indicated significant learning loss in both urban and rural places. Using data from 29 states, a Harvard study found that the average U.S. public school student in grades 3-8 lost about a half year of learning in math and a quarter year in reading from 2019 to 2022.<sup>1</sup> Statewide, Minnesota fared worse in this analysis, losing nearly one full school year for learning in math and half a school year in reading.

The Foundation contracted with two education researchers to conduct additional study into this topic, which used statewide testing data from more than 300 Minnesota public school districts to assess trends in student achievement between 2018 to 2022. In addition to overall trends in loss and recovery statewide, the study also expands analysis to high school grades 10 and 11, compares urban and rural districts, gender-specific impacts and seeks to understand how broadband availability may have played a role in learning loss.

<sup>&</sup>lt;sup>1</sup> Kane, T. J., & Reardon, S. (2022). New Research provides the first clear picture of learning loss at local level. Education Recovery Scorecard, Minnesota state report. https://educationrecoveryscorecard.org/2022/10/28/new-research-provides-first-clear-picture-of-district-level-learning-losses-in-minnesota/

## **Key Findings**

There was a steep decline in reading and math scores from 2019 to 2021, followed by an "L-shaped" recovery from 2021 to 2022.

Mean district reading proficiency<sup>2</sup> decreased by 16% and math proficiency decreased by 22% between 2019 and 2021<sup>3</sup> (Figure 1). From 2021 to 2022, proficiency in math and reading barely increased, suggesting that very little of the learning lost during COVID has been recovered in the past year.

The trend of a steep decline followed by little recovery holds for most grades. While scores decreased from 2019 to 2021 for all grade levels, the largest amount of learning loss appears to have happened in middle school grades (6-8) for both reading and math.



# Rural districts saw a slightly larger decline in reading proficiency, with rural grades 3-8 showing a continued decline one year into recovery. Changes in math proficiency were not significantly different between rural and urban districts.

On average, rural districts' reading proficiency declined nearly 17% between 2019 and 2021, with only a small recovery from 2021 to 2022. Metro districts, which include districts within the seven-county metro or greater than 7,500 students, decreased 10% from 2019 and 2021 and decreased again by 3% from 2021 to 2022. The trends in math proficiency during the study period were similar for metro and rural districts. Both saw an average decrease of 22% in math proficiency from 2019 to 2021, and both showed very small recoveries (1% in metro districts, versus 2% in rural districts).

<sup>&</sup>lt;sup>2</sup> The 'mean district proficiency' refers to the average of the individual districts' proficiency scores. The study authors calculated the mean across grades for each district and then calculated the mean of these district-level scores to get a statewide score.

<sup>&</sup>lt;sup>3</sup> Changes in proficiency are reported here as percent changes. This is not the actual decrease in percent of students proficient.



#### Broadband availability was not correlated with changes in proficiency.

During the COVID pandemic, many schools implemented distance learning models, and access to the internet at home was critical. The study authors found no relationship between changes in proficiency in either reading and math and broadband availability, measured by the percent of households in a district with broadband access. This lack of a relationship was true using multiple definitions of broadband availability, including 25/3 Mbps, 100/20 Mbps, and 100/100 Mbps.

#### Why Does This Matter?

As schools return to in-person instruction, the impacts of the COVID pandemic are not entirely in the rearview. This study showed that a substantial amount of learning was lost, and so far, not much has been recovered. Recovering from learning loss will be expensive. Research has suggested that \$700 billion will be needed to offset COVID learning loss.<sup>4</sup> Education funding is complex and can systemically disadvantage rural areas.<sup>5</sup> Therefore, with a large infusion of resources needed to ameliorate the effects of COVID-related learning loss, attention must be paid to allocating this funding in an equitable way that supports rural districts and students.

Much has been written about the potential of the COVID pandemic to exacerbate existing inequities in education access and outcomes. For learning loss, this might result in a "K-shaped" recovery, in which some students recover lost learning and others either never do or continue to lose. As the education system continues to monitor these trends, it will be important to pay attention to disparities in race, place, and class that could impact learning loss recovery. There are potentials for disparities both between rural and urban districts, and for disparities within rural districts.

<sup>&</sup>lt;sup>4</sup> Shores, K. A., & Steinberg, M. P. (2022). Fiscal federalism and K–12 education funding: Policy lessons from two educational crises. Educational Researcher. https://doi.org/10.3102/0013189X221125764.

<sup>&</sup>lt;sup>5</sup> Nolan, F. (2017). Rural Kids Count. https://www.mreavoice.org/ruralkidscountreport/

#### **Looking Ahead**

As Blandin Foundation expands its research capacity to drive better outcomes for rural Minnesota, this analysis will inform additional studies on rural and Native education to support equitable rural policy and programming.

This study presented a quantitative overview of learning loss and recovery across Minnesota. Further quantitative research following the 2022-2023 school year will present a more complete picture of the recovery.

Additional qualitative research could also add context and depth to the findings presented here. Qualitative data could also help uncover other factors driving differences between districts, especially after a purely quantitative analysis found no correlation between broadband availability and learning loss. Although recovering from learning loss will be a significant undertaking, there are many opportunities for collaboration. As this study showed, urban and rural districts are both confronting learning loss and education systems that have been impacted by COVID. This presents an opportunity to leverage what urban and rural places share to generate solutions together, ensuring that all students thrive, regardless of where they live.

For more information about this study, conducted by E&F Services, you can access the full report <u>here</u>.

